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ning of each regular issue of the PCT Gazette.

(54) Title: A PHOSPHA-ADAMANTANE (S) CATALYTIC SYSTEM

(57) Abstract: A catalyst system capable of catalysing the carbonylation of an olefinally unsaturated compound is described. The catalyst system is obtainable by combining: (a) a metal of Group VIB or Group VIII B or a compound thereof; and (b) a bidentate phosphine of general formula (I)  $\text{Ad}-(\text{CR}^4\text{R}^5\text{R}^6)_2\text{Q}^2\text{-A}-(\text{K}, \text{D})\text{Ar}-(\text{E}, \text{Z})\text{-B-Q}^1(\text{Ad})_n(\text{CR}^1\text{R}^2\text{R}^3)_m$ . Ad represents an optionally substituted adamantyl radical bonded to the phosphorous atom via any one of its tertiary carbon atoms. A method of production of the catalyst is also illustrated.

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